

DoD TechMatch

A New Tool for Creating Technology Transition Partnerships

Cynthia Gonsalves ■ Robert Barrett ■ Joshua Morrison

An essential part of the DoD technology transition mission is to promote partnering opportunities between the private sector and defense laboratories. At the very heart of this mission lies the ability to gather ever-increasing amounts of data from widespread sources and then manipulate the raw data intelligently to create information. Even so, information overload is not only a possibility, it is almost a certainty given the pace of technological growth today.

Interviews with Navy Office of Research and Technology Application managers (ORTAs) have identified challenges in information gathering, manipulation, and dissemination. These challenges created fertile ground for a Web-based system that would help in their Service-unique and DoD technology transfer responsibilities. Specifically, Navy ORTAs identified a desire for a Service-wide system that would help them manage and market their licensable technologies. They wanted a system that would help them move their technologies into the commercial marketplace, generating revenues for their laboratories and the Navy. At the same time, Navy organizations involved in technology transition requested a system that would help them ingest commercial technologies for naval use. Navy TechMatch was designed to help both missions—technology transfer and technology transition. Sponsored by the Office of Naval Research, Navy TechMatch was launched at the Naval-Industry R&D (research and development) Partnership Conference in August 2004. The system was designed and built by the Research and Development Group of the West Virginia High Tech Con-



DoD TechMatch Home Page

sortium (WVHTC) Foundation, a non-profit organization. In September 2004, the Navy TechMatch system won the prestigious Regional Industry Award, presented by the mid-Atlantic Region of the Federal Laboratory Consortium.

DoD TechMatch Launched

Always trying to leverage good work supported by the Services, the deputy under secretary of defense (advanced systems and concepts) Office of Technology Transition saw the Navy TechMatch system and requested that it be expanded to the DoD level. That was done between August and December 2004. DoD TechMatch was launched at the annual Defense Manufacturing Conference in December, and the site is now available at www.dodtechmatch.com.

Gonsalves is the DoD technology transfer transition program manager, Office of the Deputy Under Secretary of Defense (Advanced Systems and Concepts) Office of Technology Transition. **Barrett** was the chief of staff for the Navy Commercial Technology Transition Office, Office of Naval Research, from 2003 to 2004. He joined the West Virginia High Tech Consortium Foundation in September 2004 as a PM working on the TechMatch project. **Morrison** joined the Foundation in October 2003 as a program analyst; he is the DoD TechMatch business operations manager.

Six focus areas were identified in the March 2004 Report to Congress on the activities of the DoD Office of Technology Transition. DoD TechMatch contributes directly to four of the six focus areas, and indirectly to the other two (technical assistance provided to local and small businesses and IR&D to find partners for research and development efforts).

Patents / Royalties / CRADAs

DoD TechMatch contains excerpts from all Army, Navy, and Air Force licensable patents, as well as links to the U.S. Patent and Trademark Office. These excerpts are designed to represent partnering opportunities for the commercial sector. Obviously, licensed patents generate royalties. Perhaps less obvious is the fact that patents can be used as the basis for cooperative research and development agreements (CRADAs). Getting this information to industry quickly and in an easy-to-use form is essential to moving technology out of the DoD laboratory system effectively. How DoD TechMatch does this is covered in detail later.

Conferences and Tradeshows

Navy TechMatch and now DoD TechMatch have supported Navy and OSD technology transition efforts at conferences and tradeshows. Feedback from conference attendees has been overwhelmingly positive, highlighting how the system is helping ORTAs perform their job; booth traffic is always very high; and DoD technology transition is made more visible to attendees. For example, during registration at the Technology Transfer Integrated Planning Team Workshop this year, one new user asked about a particular waste treatment technology. A search on licensable patents took eight seconds. The ORTA happened to be in the main conference room, and discussions about licensing the technology were initiated at the next break. Three weeks later, the license paperwork was nearly complete and customers were waiting for the product.

Technical Assistance Provided to Local and Small Businesses

While “technical assistance” *per se* is not provided by the system, a great deal of “assistance information” is provided. For example, one company scientist had no idea how to find Small Business Innovative Research opportunities. The WVHTC Foundation staff not only helped him register with DoD TechMatch, but also helped him select the right keywords to search the most recent SBIR solicitation, where he found a number of business opportunities tailored to his company’s expertise and areas of interest.

IR&D to Find Partners for Research and Development Efforts

This is another area where DoD TechMatch helps indirectly. For example, customers with access to their own independent research and development (IR&D) may be



looking for a partner to further their own research or help commercialize it. They can search DoD TechMatch for information regarding related patents/licensable opportunities, and perhaps enter into a CRADA with a DoD lab as a partner. They might also compete for an SBIR award found on the site. Finally, they might find an opportunity on the FedBizOpps (federal business opportunities) Web site at <www.fedbizopps.gov>.

TechLink and Other Partnership Intermediaries under 15 USC 3715

TechLink and DoD TechMatch have established a working relationship. Their Web sites link directly to one another. Both groups are committed to accelerating DoD technology transfer and transition.

Transferring Technology in Support of Homeland Security Needs

DoD technology can have a variety of applications, including those important to homeland security needs. Helping make known the availability of these technologies and moving them rapidly from the labs into production enhances homeland security.

How the System Works

DoD TechMatch is a Web-based system designed to facilitate interactions between government, industry, and

academic communities. The system provides a single site where individuals and organizations can quickly access and search licensable patents as well as facilities available for commercial use through CRADAs and other partnering arrangements. DoD TechMatch also provides a single location for business opportunities from FedBizOpps and SBIR solicitations, as well as technology needs from various DoD programs. DoD TechMatch offers an innovative way for DoD PMs to notify private industry of technology needs and receive potential solutions to meet those needs. Bundled together, these features offer users valuable, relevant information and a starting point to develop a partnership with the DoD and its component Services.

Of special note is that the system operates in the unclassified realm and is open to the public. Even at this level, a great deal of useful information can flow. Registration is easy, and both online and person-to-person support are available.

DoD TechMatch is an intuitive, user-friendly tool. At the time of writing, the system contains more than 2,800 Army, Navy, and Air Force patents available for licensing to industry for commercial products and manufacturing processes. Loading of more than 2,300 Navy patents is complete; Army and Air Force information is being gathered and will be complete by summer 2005. The system has information about all three Services' research and development laboratories across the United States with more than 740 unique facilities available for commercial use.

"The elegance of design along with comprehensive data make the Navy TechMatch system a must for anyone interested in Navy technology opportunities," says Rick Shindell, president of Zyn Systems, Sequim, Wash. "The interface allows me the choice of searching by words or keyword sets, or browsing by drilling down through a logical hierarchy of data." While this comment was made specifically about Navy TechMatch, the design, human interface, and system operation of DoD TechMatch are identical.

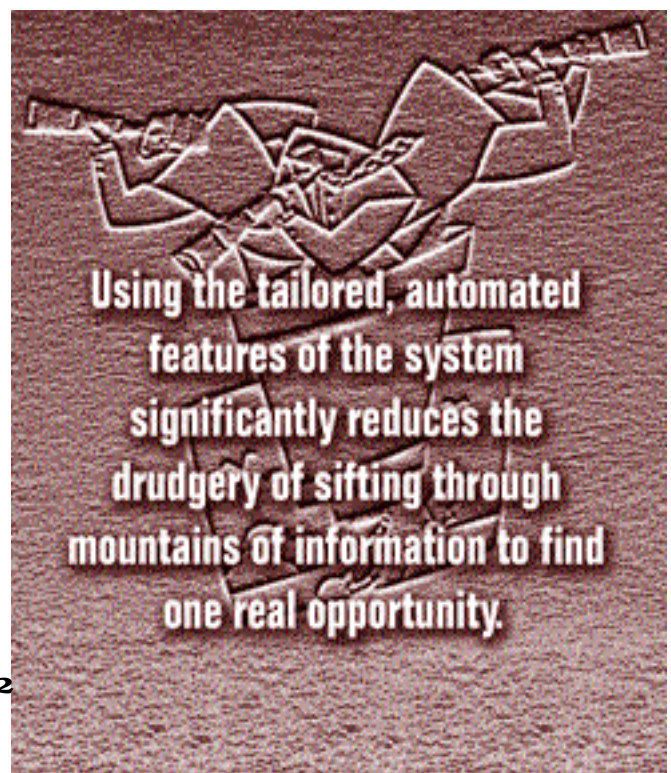
Anyone can view, sort, and search all system content for relevant information; however, registered users derive the greatest benefit from DoD TechMatch, since features that make it truly valuable are available to registered users only. Using the tailored, automated features of the system significantly reduces the drudgery of sifting through mountains of information to find one real opportunity. At no cost, registered users can receive e-mail notifications of potential business opportunities that match their capabilities or areas of interest as indicated by the keywords and sources of information (i.e., FedBizOpps, SBIR, etc.) selected at registration; the system matches new opportunities, technology needs, conferences, and trade show events against the keywords and tailors a list of matching technologies and information, which is sent by e-mail

to the user. This personalized feature—called "My TechMatch"—reduces the time and effort involved in finding potential business opportunities within the DoD. Approximately half of all the listings on FedBizOpps document sole-source awards, which are not really opportunities for other businesses to work with DoD; rather, they are documentation of already-made decisions. And an electronics manufacturer, for example, isn't interested in opportunities to build heavy equipment, and his or her original keyword choices will reflect that. The system doesn't clutter up registered users' e-mail with this kind of undesired information. Instead, only "real" opportunities matching their areas of interest are forwarded (every business day at 2 p.m. Eastern Time). FedBizOpps listings and SBIR solicitations provide contact information about the source of the opportunity or solicitation.

The Technology Needs (Tech Needs) module identifies areas where DoD is looking for rapid solutions to technology problems, usually for the acquisition community. Navy SURFTECH has posted some needs, as has the Navy Commercial Technology Transition Office within the Office of Naval Research. Once a need is posted, registered users can propose a solution directly through the DoD TechMatch system, allowing DoD to quickly find potential solutions that meet its needs and helping industry and organizations provide their services and technologies to the federal sector. We are seeking other DoD needs to add more value to the site.

Becoming a Registered User: Who and How?

Registering with DoD TechMatch is a free service, open to anyone with a valid e-mail address. At registration, users provide basic information and select, from a three-tiered list, keywords related to their areas of interest or capabilities. Users then choose sources of information





from which they would like to receive matching needs and opportunities. Finally, users are e-mailed an authorization code and a link to the DoD TechMatch Web site. Upon receipt of a confirming e-mail with authorization code, they follow the provided link back to the Web site and enter the code to finalize the registration process.

The Recent Past

The past year has been very eventful in the life of DoD TechMatch. In a period of roughly 18 months, Navy TechMatch grew from concept to a fully functional, award-winning Web-based system providing users a single source of information on Navy labs, over 380 facilities, 2,300 licensable patents, technology needs within the Navy, related programs, and Navy opportunities from FedBizOpps and SBIR solicitations. Users read about successful partnerships, learn about events they wish to attend, and register to receive free notifications of potential business avenues they wish to pursue. Another large stride forward was taken when Army and Air Force information was added to create DoD TechMatch. Content continues to grow and the number of registered users to increase. Key statistics show that users are logging on and staying on. At the time of writing, the system has over 1,400 registered users who log on multiple times a week—sometimes multiple times each day—spending over four minutes on the average. Some regularly spend 20 minutes or more.

Direct feedback about content, system friendliness, and business impact continues to validate the concept behind the site. “For the first time, it is possible to go to one site for naval opportunities, patents, conferences, and needs,” says Ted Lynch, president of Strategic Marketing Innovations. “And the greatest promise is that this product is

going DoD-wide, saving time and effort, resulting in a better understanding of DoD capabilities available for commercial use.”

But what if the registered user is interested in only one Service—all business is transacted with (for example) the Army? Would a DoD-wide approach saturate the user with undesired information, thereby being a burden rather than a boon? We agree that would be the case, so the system design allows a registered user to select sources of information. In addition, the registered user can go directly to any of the embedded Service component sites exclusive of the larger site; an Army user could go directly to <www.armytechmatch.com>, an Air Force user to <www.airforcetechmatch.com>, and a Navy user to <www.navytechmatch.com>. All three are also available from <www.dodtechmatch.com> by selecting the appropriate Service tab.

Moving Right Along

We anticipate rapid forward movement in the near future. The number of users from government, industry, and academia will continue to grow, as will the amount and value of information contained in the system. Metcalf’s Law states that the power of a network is proportional to the square of the number of nodes in the network; the number of DoD TechMatch nodes is growing rapidly. In a truly systematic interaction, customer value grows as the number of registered users and amount of information content grow—a classic representation of a “virtuous circle” [*whereby a favorable situation or result causes another that subsequently supports the first*].

Industry, academic, and DoD partners will benefit from the TechMatch concept. Tailored information will be pulled and pushed rapidly where needed. Business opportunities will surface and be acted upon, partnerships will form and flourish, and our armed forces will get technological capabilities they need.

The DoD TechMatch system has all the pieces to become a powerful and important tool for both DoD and its registered users. The TechMatch goal is to become a focal point for technology transfer and transition efforts in the DoD and its components. If initial DoD and industry response about the system is any indication of the future, DoD TechMatch will have an extremely positive impact in the world of technology transfer and transition, saving users time, identifying technological business opportunities, and meeting DoD needs.

The authors welcome comments and questions and can be reached at cynthia.gonsalves@osd.mil, rlbarrett@wvhtf.org, and jdmorrison@wvhtf.org